On August 19, 1997, BellSouth Corporation, GTE Entities, SBC Communication, Inc., and U.S. West, Inc. filed a joint petition asking the Court, in part, to clarify the correct interpretation of Section 51.315(b). On October 14, 1997, the Court granted the petitions for rehearing of BellSouth and other local exchange companies. The Court specifically vacated FCC Rule 51.315(b) (along with Rules 51.315(c)-(f)), finding that Rule 51.315(b) was contrary to Section 251(c)(3) of the Act. It reasoned as follows:

> Section 251(c)(3) requires an incumbent LEC to provide access to the elements of its network only on an unbundled (as opposed to a combined) basis. Stated another way, § 251(c)(3) does not permit a new entrant to purchase the incumbent LEC's assembled platform(s) of combined network elements (or any lesser existing combination of two or more elements) in order to offer competitive telecommunications services. To permit such an acquisition of already combined elements at cost based rates for unbundled access would obliterate the careful distinctions Congress has drawn in subsections 251(c)(3) and (4) between access to unbundled network elements on the one hand and the purchase at wholesale rates of an incumbent's telecommunications retail services for resale on the other. Accordingly, the Commission's rule, 47 C.F.R. § 51.315(b), which prohibits an incumbent LEC from separating network elements that it may currently combine, is contrary to § 251(c)(3) because the rule would permit the new entrant access to the incumbent LEC's network elements on a bundled rather than an unbundled basis.

See Iowa Utilities Board, et al. v. Federal Communications Commission, No. 96-3321, http://ls.wustl.edu/8th.cir/FCC/Opinions/963321.036, at p. 2 (October 14, 1997)(on rehearing).

Proposed Action: BellSouth proposes that the Commission revise Section 1001.D of its rules to make it consistent with Order No. U-22252-A. Additionally, BellSouth proposes new language to make clear its willingness to provide services that may be desired by CLECs to assist them in combining unbundled network elements themselves. Finally, clarifying language regarding software modifications involved with the ordering of CLEC-combined unbundled network elements is also proposed.

[Delete Section 1001.A except for first sentence]

[Add following language:]

> A requesting carrier is entitled to gain access to all of the unbundled elements that, when combined by the requesting carrier, are sufficient to enable the requesting carrier to provide telecommunications service. Requesting carriers will combine the unbundled elements themselves. CLECs may combine network elements in any manner to provide telecommunications services. ILECs will physically deliver unbundled network elements where reasonably possible, e.g., unbundled loops to CLEC collocation spaces, as part of the network element offering at no additional charge. Additional services desired by CLECs to assist in their combining or operating ILEC unbundled network elements are available as negotiated. Software modifications, e.g., switch translations, necessary for the proper functioning of CLEC-combined ILEC unbundled network elements are provided as part of the network element offering at no additional charge. Additional software modifications requested by CLECs for new features or services may be obtained through bona fide request.

3. AT&T Argument with Respect to CSAs and Promotions. In Comments filed in Docket No. 22252, AT&T asserted that the Eighth's Circuit's opinion invalidates this Commission's rulings with respect to resale of CSAs and promotions. No other party has raised this issue and AT&T's argument on this point is a classic "red herring". The Eighth Circuit's decision upholding the FCC's rules on restrictions on resale changes absolutely nothing. The opinion merely upheld the status quo. The FCC rules regarding restrictions on resale had not previously been stayed by the Court, and thus were applied by this Commission in resolving the arbitrations and in amending the Louisiana Regulations. This Commission's rulings with respect to CSAs and promotions fully comport with the FCC's unstayed rules, as affirmed by the Eighth Circuit, and the comments of AT&T and MCI are nothing more than rearguments already considered and rejected by the Commission.

As Order No. 22145 makes plain, in resolving the AT&T arbitration, this Commission took due note of those portions of the FCC's August 1996 Interconnection Order that had been

stayed by the Eighth Circuit pending its decision, and those portions which were not stayed. The Commission expressly noted that unstayed provisions of the Order were binding. *See* Order No. 22145, at p. 1. Those portions of the FCC's August 1996 Interconnection Order that were not stayed by the Eighth Circuit, including §51.613(a), were followed by this Commission in ruling on the issues in the AT&T arbitration. Section 51.613(a), which deals with "Restrictions on resale," provides as follows:

> (a) Notwithstanding § 51.605(b) of this part, the following types of restrictions on resale may be imposed:
>
> . . . .
>
> (2) Short term promotions. An incumbent LEC shall apply the wholesale discount to the ordinary rate for a retail service rather than a special promotional rate only if:
>
> (A) such promotions involve rates that will be in effect for no more than 90 days;[1] and
>
> (B) the incumbent LEC does not use such promotional offerings to evade the wholesale rate obligation, for example by making available a sequential series of 90-day promotional rates.
>
> (b) With respect to any restrictions on resale not permitted under paragraph (a), an incumbent LEC may impose a restriction only if it proves to the state commission that the restriction is reasonable and nondiscriminatory.

BellSouth's position in the arbitration was that services such as CSAs and short term promotions are not services available for resale under the Act (it did not dispute that long term promotions were subject to the wholesale resale obligation under the FCC rules). AT&T advocated the position that CSAs and short term promotions are services that should be available for resale at the wholesale resale discount. This Commission determined, consistent with the FCC First Report and Order, that short term promotions would not be available for resale,

[1] The FCC's rationale for excluding short term promotions from the Act's wholesale resale obligation is set forth in ¶¶ 949-950.

although long term promotions would be available for resale at the wholesale discount. *See* Order No. U-22145 at pp. 4-5, & 58 and Order No. U-22145-A at p. 3. It further decided, consistent with its authority under the FCC rules, to impose "reasonable and nondiscriminatory" restrictions on resale -- i.e., that CSAs are available for resale at no additional discount. Both of these rulings, which were incorporated as amendments to the Louisiana Regulations, are reasonable and nondiscriminatory restrictions on resale that are expressly permitted by the FCC's First Report and Order. *See* Section §51.613(a) and ¶ 949. Plainly, the Eighth Circuit's endorsement of the very same rules that this Commission followed do not require this Commission to undo what it has done. For these reasons, BellSouth respectfully suggests that Section 1101.B of the Louisiana Regulations require no modification in light of the Eighth Circuit decision.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing pleading to be served on counsel for all parties to this proceeding, by hand or by U.S. mail, postage pre-paid, on this 29th day of October, 1997.

EXHIBIT 7

Comments of AT&T on the Eighth Circuit Opinion Docket No. U-20883

BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

The Development of Rules and Regulations Applicable to the Entry and Operations of, and the Providing of Services by, Competitive and Alternate Access Providers in the Local, Intrastate and/or Interexchange Telecommunications Market in Louisiana

DOCKET NO. U-20883

AT&T'S COMMENTS AND PROPOSED AMENDMENTS TO THE LPSC'S REGULATIONS FOR COMPETITION IN THE LOCAL TELECOMMUNICATIONS MARKET BASED ON THE *IOWA UTILITIES BOARD* DECISION

Pursuant to the Louisiana Public Service Commission's ("LPSC" or "Commission") Notice of Proposed Rulemaking dated September 15, 1997, AT&T Communications of the South Central States, Inc. ("AT&T") submits the following comments regarding the impact of the decision of the United States Court of Appeals for the Eighth Circuit in ***Iowa Utilities Board, et al. v. Federal Communications Commission*, 120 F.3d 753 (8th Cir. 1997)** on the Commission's Regulations for Competition in the Local Telecommunications Market ("local rules"). In accordance with the Commission's notice, AT&T also submits proposed amendments to the local competition rules based on the Eighth Circuit decision.

As ordered by Congress in the Telecommunications Act of 1996 ("Act"), the Federal Communications Commission ("FCC") promulgated rules and regulations to

implement the local competition provisions of the Act.[1] Numerous parties, including several incumbent local exchange carriers ("ILECs"), challenged certain portions of the First Order and Report issued by the FCC. These challenges were heard before the United States Court of Appeals for the Eighth Circuit in the ***Iowa Utilities Board et al., v. FCC, supra***[2].

I. UNBUNDLED NETWORK ELEMENTS

A.
ILECs Must Provide Access to CLECs to Enable a CLEC to Recombine Network Elements

The Eighth Circuit's decision on rehearing addressed the obligation of an ILEC under federal law to provide pre-existing combinations of network elements to requesting CLECs. The court's decision, however, did not address whether an ILEC should be required to provide such pre-existing combinations as a matter of state law. AT&T believes that they should be required to do so. The only purpose served by an ILEC's separation of pre-existing combinations of network elements is to increase the costs to its competitors and delay effective local service competition. Moreover, the unwarranted separation of such elements will only cause inconvenience and unnecessary disruption of service to customers. For this reason, AT&T proposes that the following provision be added to Section 1001 of the Commission's local rules:

Proposed provision:

> "An ILEC shall provide unbundled network elements in a manner that allows requesting CLECs to combine such network elements in order to provide telecommunications service. Except upon

[1] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order CC Docket 96-325 (August 8, 1996): ("First Order and Report")

[2] On rehearing, the Eighth Circuit vacated 47 C.F.R. §51.315(b) of the FCC's rules

request, an ILEC shall not separate required network elements that the ILC currently combines."

If the Commission chooses not to adopt such a requirement under state law, the Eighth Circuit made it clear that an ILEC must provide to CLECs the necessary physical access to the ILECs network facilities and technical information sufficient to permit the CLEC to perform the necessary combination and recombination of network elements.[3] Without the ability to create the combinations, the CLECs are at a distinct disadvantage to the ILECs, and competition is restricted.

Therefore, AT&T proposes that a provision be added to Section 1001 of the Commission's local rules to place an affirmative duty on an ILEC to provide the necessary access to a CLEC needed to perform the combination.

Proposed provision:

"An ILEC shall provide unbundled network elements in a manner that allows requesting CLECs to combine such network elements in order to provide telecommunications services. An ILEC must provide to the CLEC the necessary physical access to the ILEC's network facilities and technical information sufficient to permit the CLEC to perform the combining."

B.
Vertical Features are Part of the Switching Facilities

The Eighth Circuit affirmed the FCC's authority to define the term "network element".[4] Included in the unbundling rules affirmed by the Eighth Circuit is the provision that vertical features are part of the switch and cannot be separated. Vertical features, such as call forwarding and call waiting, are provided through operation of

[3] The Eighth Circuit stated: "While the Act requires incumbent LECs to provide elements in a manner that enables the competing carriers to combine them..."

[4] "We believe that the FCC's determination that the term 'network element' includes all of the facilities and equipment that are used in the overall commercial offering of telecommunications is a reasonable conclusion and entitled to deference." Iowa Utilities Board v. FCC, 120 F.3d 753 at pp. 808-809.

hardware and software comprising the facility that is the switch, and thus are features and functions of the switch.[5] As such the FCC has ruled that vertical features are part of the unbundled local switching element.[6]

Because the switch and its vertical features are treated as one by the law, the resale pricing should reflect only one cost. An ILEC should not be allowed to charge a CLEC twice for the same feature (i.e., the switch and the vertical features). Such an action would serve no other purpose than to increase the costs of entry into the local market for a CLEC. The FCC has recognized this logic and stated:

> "At this time we decline to require further unbundling of the local switch into a basic switch element and independent vertical feature elements. Such unbundling does not appear to be necessary to promote local competition."[7]

Therefore, AT&T proposes the following provision be added to Section 1101 of the Commission's local rules:

Proposed provision:

> **"Vertical features, such as call waiting, caller ID and call forwarding, are part of the software included in the hardware of the switching element. A CLEC obtains all the vertical features in a switch at no additional cost when the CLEC purchases an unbundled switch, either alone or in combination with other network elements."**

[5] First Order and Report 8413
[6] *Id.*
[7] First Order and Report 8414

II.
Contract Service Arrangements are Available for Resale Without Restriction

Currently, the Commission's local rules restrict the resale of contract service arrangements ("CSAs"). Section 1101 (B)(2) states:

> "2. Contract Service Arrangements which are in place on January 28, 1997, shall be exempt from mandatory resale. All CSAs entered into after January 28, 1997, and existing CSAs upon termination after January 28, 1997, will be subject to resale, at no discount."

Section 251(c)(4)(B) of the 1996 Act specifically states that an ILEC is "not to impose unreasonable or discriminatory conditions or limitations on the resale of such telecommunications service." Based on this section of the Act, the FCC's First Report and Order provided that no exception from the wholesale requirement existed "for promotional or discounted offerings, ***including contract and other customer-specific offerings.***"[8] [Emphasis added.]

In the *Iowa Utilities* suit, the ILECs challenged this FCC provision arguing that discount programs, such as CSAs, are not telecommunication services that must be offered for resale. The Eighth Circuit rejected the ILECs challenge. In upholding the FCC's rule, the Eighth Circuit stated:

> "This rule is a valid exercise of the Commission's authority under subsection 251(c)(4)(B) because it restricts the ability of incumbent LECs to circumvent their resale obligations under the Act simply by offering their services to their subscribers at perpetual 'promotional' rates."[9]

Because the Eighth Circuit has found the FCC's provision to be a reasonable interpretation of the Act, the Commission's local rules should be amended by adopting

[8] First Order and Report ¶948

[9] Iowa Utilities Board v. FCC, at p. 819

the FCC's rule on CSAs as upheld by the Eighth Circuit. AT&T proposes the following revisions to Section 1101 of the local rules.

Current Provision:

"2. ~~Contract Service Arrangements which are in place on January 28, 1997, shall be exempt from mandatory resale. All CSAs entered into after January 28, 1997, and existing CSAs upon termination after January 28, 1997, will be subject to resale, at no discount.~~"

Proposed provision:

"A. To encourage and promote competition in the local telecommunications markets, all facilities based TSPs shall make unbundled retail features, functions, capabilities and services, and bundled retail services available for resale to other TSPs on a nondiscriminatory basis. Contract Service Arrangements are included in services that a TSP must make available to other TSPs for resale."

III.
Access to Unbundled Network Elements Must be "At Least Equal in Quality"

Section 251(c)(2)(c) requires ILECs to provide interconnection that is "at least equal in quality" to that provided by the ILEC to itself. The Eighth Circuit rejected the FCC rule requiring an ILEC to provide to a requesting carrier interconnection and access to unbundled network elements at levels of quality superior to the levels the ILEC provides to itself. The Eighth Circuit reasoned that the statutory language requiring that access be "at least in equal in quality" could be read to permit a LEC to provide superior quality access, but did not require it. However, the Eighth Circuit determined that the phrase "at least equal in quality" establishes the "floor below which the quality of interconnection may not go."[10]

[10] Iowa Utilities Board v. FCC, at p. 813

Currently, the Commission's local rules only require ILECs to provide interconnection "substantially equivalent" or "at least as efficient" as it provides itself. To ensure that the quality of interconnection provided to CLECs is not below the floor mandated by Congress, the Commission should adopt the language of the FCC and require an ILEC to provide interconnection and access "at least equal in quality" as it provides itself.

AT&T proposes the following amendments:

SECTION 1001. UNBUNDLING

Current Provisions:

"D. TSPs shall be able to interconnect with all unbundled basic network components at any technically feasible point within an ILEC's network. Access, use and interconnection of all basic network components shall be on rates, terms and conditions ~~substantially equivalent~~ to those an ILEC provides to itself and its affiliates for the provision of exchange, exchange access, intraLATA toll and other ILEC services."

"F. ILECs shall put into place a service ordering, repair, maintenance, and implementation scheduling system for use by TSPs, which is ~~equivalent~~ to that used by the ILECs and their affiliates for their own retail exchange services. Data pertaining to service and facility availability shall be made available to TSPs ~~in the same manner~~ used by the ILECS and their affiliates."

Proposed provision:

"D. TSPs shall be able to interconnect with all unbundled basic network components at any technically feasible point within an ILEC's network. Access, use and interconnect of all basic network components shall be on rates, terms, and conditions at least equal in quality to those an ILEC provides to itself and its affiliates for the provision of exchange, exchange access, intraLATA toll and other ILEC services."

"F. ILECs shall put into place a service ordering, repair, maintenance, and implementation scheduling system for use by TSPs, which is at least equal in quality to that used by the ILECs and their affiliates for their own retail exchange services. Data pertaining to service and facility availability shall be made available to TSPs in a manner at least equal in quality to that used by the ILECS and their affiliates."

SECTION 1101. RESALE

Current provisions:

"A. To encourage and promote competition in the local telecommunications markets, all facilities based TSPs shall make unbundled retail features, functions, capabilities and services, and bundled retail services available for resale to other TSPs on a nondiscriminatory basis."

"G.(1) Direct, on-line access to the ILECs' mechanized order entry system. Access shall be considered adequate when the provided access permits the reseller to access an ILEC's mechanized order entry system to place initial orders, access information concerning service and feature availability, modify orders previously entered, schedule the installation of services and any necessary equipment, and to check on the status of all transactions that the reseller has initiated ~~in a manner at least as efficient~~ as the access provided the ILEC's own employees."

"G. (last paragraph) This access shall be ~~equal~~ that provided to the ILECs' own personnel. The Commission and its Staff will monitor the progress, or lack thereof, made in this area, and, if deemed necessary after notice and hearing, will impose an additional transitional resale discount on an ILEC's features, functions, capabilities and services until an ILEC's operating systems are accessible by TSPs on the terms specified herein."

Proposed provisions:

"A. To encourage and promote competition in the local telecommunications markets, all facilities based TSPs shall make unbundled retail features, functions, capabilities and services, and bundled retail services, at least equal in quality that it provides itself, available for resale to other TSPs on a nondiscriminatory basis ."

"G.(1) Direct, on-line access to the ILECs' mechanized order entry system. Access shall be considered adequate when the provided access permits the reseller to access an ILEC's mechanized order entry system to place initial orders, access information concerning service and feature availability, modify orders previously entered, schedule the installation of services and any necessary equipment, and to check on the status of all transactions that the reseller has initiated in a manner at least equal in quality as the access provided the ILEC's own employees."

"G. (last paragraph) This access shall be at least equal in quality as that provided to the ILECs' own personnel. The Commission and its Staff will monitor the progress, or lack thereof, made in this area, and, if deemed necessary after notice and hearing, will impose an additional transitional resale discount on an ILEC's features, functions, capabilities and services until an ILEC's operating systems are accessible by TSPs on the terms specified herein."

IV.
Access to Customer Service Records

Section 901(T) of the local rules states in part: "A TSP is not required to provide other TSPs with electronic access to its customer service records." However, in Order U-22252-A, the Commission ordered that BellSouth provide to CLECs electronic access through its electronic interfaces in the pre-ordering phase to customer service record information. As this Order demonstrates a change in the position of the Commission on the issue of access to customer service records, AT&T asserts that the local rules should be amended to reflect the new position.

AT&T proposes that Section 901(T) of the local rules be amended as indicated below:

Current provision:

> "T. ~~A TSP is not required to provide other TSPs with electronic access to its customer service records~~. TSPs are~~, however,~~ directed to accept three-way calls from a customer and another TSP and shall, if the customer's consent is expressly given to the TSP, disclose the customer's current services and features. All TSPs shall implement an electronic "switch as is" process by which it shall switch a customer to another TSP with all services and features to which the customer is currently subscribing, upon receipt of appropriate customer authorization. The "switch as is" process described above shall result in no additional cost to the end user."

Proposed provision:

> "T. An CLEC shall have electronic access in the pre-ordering and ordering phases to the ILECs customer service record information. In addition, TSPs are directed to accept three-way calls from a customer and another TSP and shall, if the customer's consent is expressly given to the TSP, disclose the customer's current services and features. All TSPs shall implement an electronic "switch as is" process by which it shall switch a customer to another TSP with all services and features to which the customer is currently subscribing, upon receipt of

appropriate customer authorization. The "switch as is" process described above shall result in no additional cost to the end user."

V.
Conclusion

The preamble to the local competition rules states that the Commission: "hereby promulgates the following regulations...to foster the transition from monopoly to competitive local telecommunications markets in Louisiana." The local rules must include regulations that guide telecommunications providers toward competition in the local market.

AT&T has proposed amendments to the Commission's local rules that, if adopted, would foster local competition in Louisiana. AT&T respectfully requests that its proposed changes to the Commission's local rules be adopted.

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EXHIBIT 8

Oftel

Pricing of Telecommunications Services from 1997: Annexes to the Consultative Document

investment and borrowings rather than daily averages.

Modern Equivalent Assets (MEA)

The valuation of the firms' existing assets at the cost of replacing them with assets which serve the same function and which a new entrant might be expected to employ. Such assets are likely to incorporate the latest available (proven) technology.

Operating Capability Maintenance (OCM)

A CCA accounting convention, where the depreciation charge to the profit and loss account relates to the current replacement cost of the firm's assets, taking account of specific and general price inflation.

Productive Efficiency

Productive efficiency is maximised when each firm in the industry carries out its activities at minimum cost and when activities are distributed between firms such that industry-wide costs are minimised.

PSTN

Public Switched Telephone Network. The telecommunications networks of the major operators, on which calls can be made to all customers of all PSTNs.

Return on Capital Employed (ROCE)

See Accounting Rate of Return.

Stand-alone Costs

The costs to a single-product firm of providing a service. The stand-alone costs of a service exceed the *incremental costs* to a multi-product firm if there are *economies of scope*.

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December 1995

Consultative Document

Issued by the Director General of Telecommunications

PRICING OF TELECOMMUNICATIONS SERVICES FROM 1997

Annexes to the Consultative Document

This is the second part of the Consultative Document on BT price controls and interconnection charging. It contains the six annexes (Annexes A–F) referred to in the main document.

CONTENTS

ANNEX B

Trends in Prices and Quality of Service

This Annex contains the following tables:

Table B1 [illegible]

The value of the PSTN price cap	Elements in the baskets of services detailed in licence and subject to price control	Other main price constraints	Services where no price constraint applies	Percentage of BT's group turnover under price control
RPI–3 (1984–1989)	**1** Residential & business exchange line rentals **2** Local and national direct dialled call charges	**1** Residential exchange line rental (maximum RPI+2) **2** Low user scheme	**1** Telephone instrument rental **2** International calls **3** Operator services including directory enquiries **4** Calls from public telephone boxes **5** Connection charges **6** Private circuits **7** Calls to mobile	[illegible]
RPI–4½ (1989–1991)	**1** Residential & business exchange line rentals **2** Direct dialled local & national call charges **3** Operator assisted inland calls & directory enquiry service **4** Private circuits basket (RPI+0) **5** 0800, 0345 services	**1** Residential & business exchange line rentals (RPI+2) **2** Connection charges installation (RPI+2) **3** Low user scheme **4** Introduction of representative residential bill (informal control)	**1** Telephone instrument rental **2** International calls **3** Calls from public telephone boxes **4** Private circuits **5** Calls to mobile	[illegible]
RPI–6.5% (1991–1993)	**1** Exchange line rentals **2** Local and national direct dialled call charges **3** Operator assisted calls and directory enquiry service **4** Private circuit basket (RPI) **5** International direct dialled calls **6** Quantity discounts and alternative bands to basic volume rates **7** 0800, 0345 services	**1** Residential and single line rental (RPI+2) multi line rental (RPI+5) **2** Connection charges (RPI+2) **3** Low user scheme **4** Medium residential bill (RPI)	**1** Telephone instrument rental **2** Calls from public telephone boxes **3** Calls to mobile	[illegible]
RPI–7.5% (1993–1997)	**1** Exchange line rentals **2** Local and national direct dialled call charges **3** Operator assisted calls and directory enquiry service **4** Private circuit baskets – inland analogue, inland digital and international (RPI) **5** International direct dialled calls **6** Connection charges **7** 0800, 0345 services	**1** Exchange line rentals (RPI+2) except for wholesale lines (RPI+5) **2** Individual prices in basket limited to RPI except for exchange line rentals **3** Extension of low user scheme **4** Individual private circuits analogue (RPI+2) and digital (RPI+1)	**1** Telephone instrument rental **2** Calls from public telephone boxes **3** Calls to mobile **4** Calls to premium rate services	[illegible]

Table B2(a)

	1984/ 1985 %	1985/ 1986 %	1986/ 1987 %	1987/ 1988 %	1988/ 1989 %	1989/ 1990 %	1990/ 1991 %	1991/ 1992 %	1992/ 1993 %	1993/ 1994 %	1994/ 1995 %	1995/ 1996 %
Change in RPI in base period	+5.1	+7.0	+2.5	+4.2	+4.6	+8.3	+9.8	+5.8	+3.9	+1.2	+2.6	+3.5
RPI minus X	+2.1	+4.0	0.5	+1.2	+1.6	+3.8	+5.3	0.4	2.4	6.3	4.9	4.0
Permitted increase	+2.1	+4.1	0.1	+1.3	+2.8	+3.8	+5.5	0.2	1.0	6.9	4.9	1.5
Changes in price of:												
Exchange line rental												
domestic	+7.1	+8.5	+3.7	0.0	0.0	+10.0	+11.6	+7.8	+5.9	+3.2	+4.6	0.0
business	+6.8	+8.8	+3.9	0.0	0.0	+10.1	+11.8	+7.7	+5.9	+3.2	+4.6	0.0
Connection charges												
domestic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	0.6	0.0
business	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24.6	11.3	0.0
Change in the effective price of:												
Local calls												
peak	+6.8	+6.4	+18.2	0.0	0.0	0.0	4.5	+3.5	0.0	22.6		
standard	+6.8	+6.4	+6.4	0.0	0.0	+4.3	4.5	+4.7	0.0	0.0	8.7	0.0
cheap	+6.8	+6.4	3.6	0.0	0.0	+3.7	+10.1	+4.6	0.0	0.0	1.2	0.0
weekend											22.5	0.0
National a												
peak	+6.8	+6.1	+1.6	0.0	0.0	0.0	8.8	0.0	0.0	23.2		
standard	+6.8	+13.3	+1.1	0.0	0.0	0.0	9.0	0.0	0.0	[illegible]	8.3	0.0
cheap	+23.3	+6.1	+2.7	0.0	0.0	+3.6	+6.0	+4.5	0.0	[illegible]	2.5	0.0
weekend cheap										5.0	10.5	0.0
National b1												
peak	10.3	14.0	12.0	0.0	0.0	0.0	9.9	0.0	0.0	23.3		
standard	10.2	13.8	12.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	2.7	0.0
cheap	+6.8	+6.1	12.0	0.0	0.0	0.0	+7.1	+4.9	0.0	0.0	6.9	0.0
weekend cheap										13.3	9.7	0.0
National b												
peak	14.0	6.2	16.0	0.0	0.0	0.0	10.2	0.0	0.0	23.5		
standard	13.9	4.9	17.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0	30.6	0.0
cheap	+6.8	+6.4	6.2	0.0	0.0	0.0	+7.0	+4.9	0.0	0.0	29.6	0.0
weekend cheap										55.2	7.6	0.0
International calls	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.8	3.2	5.5	4.4	0.0
Directory enquiry charges	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+4.4	0.0	0.0	0.0	[illegible]	0.0
Weighted average[9,11]	+2.0	+3.7	0.3	0.0	0.0	+3.5	+5.3	+2.1	+1.0	[illegible]	[illegible]	[illegible]
Standard discount and for [illegible]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.0	[illegible]	[illegible]	[illegible]	[illegible]
Optional packages	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.9	0.9	n.a.	n.a.	n.a.
Overall weighted average[11]	+2.0	+3.7	0.3	0.0	0.0	+3.5	+5.3	0.7	0.5	6.9	7.3	0.0
RPI index (all items)[12]	106.9	109.4	114.3	119.7	129.6	142.3	150.2	155.8	157.9	161.6	167.3	169.0
% change (July 1984=100)	6.9	2.4	4.4	4.8	8.2	9.8	5.5	3.8	1.4	2.3	3.5	1.0
RPI index (telecoms)[13]	106.8	113.1	115.6	116.8	116.8	122.6	135.5	139.2	139.8	131.8	124.7	124.7
% change (July 1984=100)	6.8	5.9	2.3	1.0	0.0	4.9	10.6	2.7	0.4	5.7	5.4	0.0

Notes:

1984-1989 X = 3; 1989-1991 X = 4.5; 1991-1993 X = 6.25; from 1 August 1993 until July 1997, X = 7.5
After allowing for carryover of unused allowances from previous years
Including basic telephone instrument in 1984 only
In November 1987 there was no increase in standard business rental but rental for low loss exchange lines increased
Includes all business and residential connection charges from August 1993
In March 1994 peak rate amalgamated with standard rate to become daytime rate
This was charged at cheap rate prior to its introduction in December 1993 for national calls and in June 1995 for local calls
In 1986 and again in 1989 routes were transferred from b to b1. Allowances were made for this in computing the weighted average. In September 1994 the b rate was eliminated
The 1990/91 figure is directory enquiry revenue as a percentage of total regulated revenue when charges were introduced
Including services not identified above, in particular shared exchange lines, linklines, midnight lines, low loss lines and low user schemes
September 1989 includes the effect of a reduction in the number of concessionary days
Net discount as a percentage of the total regulated revenue
The RPI values shown are the July figures at the end of the relevant price control year. The 1995/96 figure is based on the September 1995 RPI data only
n.a. Not applicable or not included in the basket of controlled services

Table B2(b)

	Over whole period (from July 1984)	
	Cumulative % change	**In real terms**
Change in price of:		
Exchange line rentals		
domestic	82.3	7.9
business	83.0	8.3
Connection charges		
domestic	0.7	5.0
business	33.1	16.0
Change in effective price of:		
Local calls		
peak	5.6	41.1
standard	15.2	31.9
cheap	29.3	23.5
weekend	1.4	40.0
National a calls		
peak	25.9	56.1
standard	6.4	37.1
cheap	50.7	[illegible]
weekend cheap	26.3	[illegible]
National b1 calls		
peak	54.4	[illegible]
standard	40.4	61.7
cheap	4.6	81.1
weekend cheap	39.6	64.3
National b calls		
peak	63.0	[illegible]
standard	51.5	71.[illegible]
cheap	14.5	49.3
weekend cheap	50.5	[illegible]
International calls	[illegible]	[illegible]
Directory enquiry charges	41.0	[illegible]
Weighted average[8,9]	[illegible]	
Standard discounted and for optional packages	[illegible]	
Overall weighted average[9]	[illegible]	
RPI index (all items)[11]	[illegible]	

Notes

[illegible]

Table B3

	Percentage changes in BT's average prices:			
	Total	Business	Residential[1]	RPI[2] (%)
1990/91	5.3	2.5	9.2	9.8
1991/92	0.7	-4.7	2.7	5.8
1992/93	0.5	3.4	0.7	3.9
1993/94	6.9	8.0	-6.2	1.2
1994/95	7.3	8.3	-6.5	2.6
Cumulative percentage changes				
1990/91 1994/95	-10.2	-20.4	1.0	25.3
1990/91 1992/93	4.0	-5.6	12.9	20.7
1993/94 1994/95	13.7	-15.6	12.3	3.8

1 These figures should be read in conjunction with Paragraph 1.44
2 The change in the Retail Prices Index employed in the RPI-X formula

Table B4

	1984/ 1985	1985/ 1986	1986/ 1987	1987/ 1988	1988/ 1989	1989/ 1990	1990/ 1991	1991/ 1992	1992/ 1993	1993/ 1994	1994/ 1995
Network reliability											
Local calls failed %	2.0	1.7	1.8	2.0	1.6	1.1	0.6	0.3	0.2	0.1	
National calls failed %	4.4	4.1	4.3	4.2	3.0	1.7	0.8	0.5	0.2	0.1	
% UK call failures due to BT											0.2
Network faults per line per annum	n.a	0.20	0.19	0.22	0.20	0.20	0.18				
Customer reported faults per connection per annum								0.16	0.17	0.16	0.16
Fault repair											
Faults cleared within 2 working days	n.a	87.1	83.2	83.3	92.5	94.4	96.4				
Faults cleared within 2 working days **(business)**								[illegible]	98.5	98.6	98.9
Faults cleared within 2 working days **(residential)**								[illegible]	95.8	[illegible]	[illegible]
Installation											
Business orders completed in 6 working days % **(old)**	n.a	60.8	52.8	45.6	56.8	62.6	76.0				
Business orders completed in 6 working days %[2] **(new)**								75.1	68.6	66.5	64.9
Residential orders completed in 8 working days %	n.a	59.4	45.6	39.7	63.3	73.6	81.7	84.1	84.2	83.5	81.5
Operator services											
Inland operator calls answered in 15 secs %	84.6	85.6	85.2	82.3	84.2	83.7	87.2	92.1	92.2	90.9	90.9
Inland directory enquiry calls answered in 15 secs %[3]	n.a	n.a	n.a	76.3	83.1	84.5	87.5	93.5	88.1	89.7	91.1
Payphones											
% Payphone serviceability	n.a	n.a	n.a	n.a	93.9	94.7	95.1	96	94.5	95.6	95.1

Notes:
1 Estimates were calculated by averaging monthly values. Thus, they may not be accurate to the number of significant digits presented in the table.
2 The basis of this indicator has changed from the results published from the April to September report onwards. The measure was extended to incorporate all relevant orders which are deemed capable of being completed by two people in one working day as opposed to one person in one working day.
3 Before April 1987 the measure related to calls answered in 25 seconds. Statistics on this basis are available only for 1985/86 (74%).
n.a. = not available

Market Definitions

C.1 OFTEL has identified the following markets to be considered in the context of the Price Control Review:

- Access
- Inland switched calls
- IDD calls
- Operator assisted calls /DQ
- Specially tariffed services (eg 0800, 0345 etc)
- Low capacity private circuits (all analogue and digital up to 64 kbit/s)
- High capacity private circuits (digital greater than 64 kbit/s)
- International leased low capacity circuits
- *International leased high capacity circuits*
- Vision circuits
- Telex
- Payphones
- Basic rate ISDN
- Primary rate ISDN
- Broadband switched mass market services
- Value added and data services
  - (i) network management/support services
  - (ii) messaging/transactional services
- The supply of terminal equipment
- Analogue mobile
- Digital mobile (including mobile data)

(**Note:** These categories cannot be regarded as definitive. Markets can, of course, change over time - for example, as technology changes.)

CUSTOMER GROUPS

C.2 The customer groups referred to in Chapter 3 are described below in terms of their estimated spend on fixed link telecoms and type of telecoms usage. The spend on mobile telecoms has not been estimated across the customer segments although it is clearly an important element for businesses and *increasingly for the residential market*.

C.3 Some of the key characteristics of each of the customer groups that can be broadly associated with the telecoms spend level are also given. The groupings are not intended to be a precise analysis but, instead, a robust means of helping to gauge the impact of telecoms price changes and competition on different customer groups.

C.4 The six basic groups (three business and three residential) with further sub-divisions, where appropriate, are set out below.

BUSINESS CUSTOMERS

A Global customers

- Telecoms spend worth in aggregate over £2bn pa
- Spend £10m upwards per company
- Estimate over 1000 lines each
- Multinational companies, comprising over 200 businesses, individual company turnover generally in excess of £0.5bn
- Seeking packaged/tailored mix of advanced and managed services in and outside UK - one stop *shop for advice and solutions*
- Includes significant proportion of travellers market – users of hotel phones, chargecards, collect calls, country direct services, payphones and mobiles

B "Large Businesses"

- Aggregate telecoms spend worth £3bn to £4bn a year
- Wide range of estimated telecoms spend for each company, probably over £0.5 million a year
- Number of lines in range of 100 to 1000
- 7000+ businesses in total, (over 250 employees) all with dedicated telecoms manager or IT director with telecoms responsibility, typical turnover over £100m
- Needs increasingly becoming sectorised - "business solutions" which integrate communications and IT and re-engineer the business.
- Could segment further by sector, eg financial services, retail, manufacturing etc

B1 Large multi-site businesses

- Large companies with geographic spread in UK (mainly retail chains); dedicated telecoms manager; possibly 3500 businesses
- Looking for one stop solutions; quality and availability of service; solutions engineered to their business needs; seeking more choice.

B2 Other Large Businesses

- As for large multi-site businesses in B1 but without geographic spread (more manufacturing based than retail)
- More choice available (dependent on location).

C Small and medium size enterprises (SMEs)

- Aggregate telecoms spend ranging from £4bn to £5bn a year
- Comprises some 300,000 medium and 'medium to small' sized businesses plus around 3 million small, mainly one person, businesses
- Seeking lower prices but also services that give them business advantage.

C1

- Medium sized businesses estimated around 50 to 100 lines per company
- Telecoms spend in region of £0.25 million each
- Typical company turnover likely to be in the region of £20 million up to £100 million
- Looking for assured quality of voice and data transfer services

C2

- Medium-small, 5–20 lines, telecoms spend in the range of £10k to £25k a year
- Turnover range from £1m up to £20m
- Looking for price and quality improvements, better value for multiple lines, starting to show interest in advanced services

C3

- Small businesses 1–4 lines, majority 1 line
- Low telecoms spend, possibly £300 pa
- DTI estimate around 3m businesses have less than 5 employees which roughly equates with 1 to 4 line businesses and is likely to include much of the teleworking community
- Increasing blurring with some of the residential sector in terms of needs
- Looking for lower prices, geographic availability, some business support services, use of mobile

RESIDENTIAL CUSTOMERS

D 'Comfortable' residential

- Aggregate telecoms spend worth between £3bn and £4bn pa
- Looking for alternative service/tariff packages, overall value for money, new services, eg Internet access, extra lines
- Between 14.5 and 17.5 million households altogether
- Income level greater than £7500 pa

D1 High spenders

- Telecoms spend over £70 per quarter
- Rough estimate 4 million households, overlap with some small businesses
- High proportion of international, national calls
- Use of mobile, fax, other facilities
- Typically mainly 30–50 age group, social classes A to C2, full time employment, owner occupiers

D2 Medium spenders

- Telecoms spend £35 to £70 per quarter
- Rough estimate 8.5 to 9.5 million households
- Typically in 20–40 age group, social class C2 and C1, in employment

D3 Low spenders

- **Choose** to spend less on phone (around £35 or less per quarter)
- Estimate 2.5 to 3.5 million households
- Not on lowest 20% of income but some of them benefit from Light User Scheme
- Typically in social class C2 and C1, in employment (two thirds) or retired (one in five), owner occupiers

E Less Comfortable Residential

- Telecoms spend lower generally less than £70 per quarter
- Comprises 4–6 million households with income of less than £7500 a year
- Aggregate telecoms spend worth around £0.5 bn to £1 bn a year

E1 Just affordable

- Spend around £35 to £70 per quarter
- 2.5 to 3.5 million households
- Around half over 60 years old, mainly social classes C2 to E, over two fifths in one adult households
- Often late payers, looking for basic POTS, choice of service packages, services which help them manage phone costs

E2 Hard up low users

- Eligible for light user scheme, spend £35 or less per quarter
- Around 1.5 to 2.5 million households
- Around three quarters over 60 years old, social classes D and E, nearly two thirds in one adult households, about two fifths in local authority housing
- Phone as a lifeline, for emergencies and incoming calls

E3 People who cannot use a phone

- 400,000 potential users of text relay services who cannot use a conventional phone even with an amplifier or inductive coupler
- In total there is an estimated 6.7 million people in the UK who have some form of disability, including the 400,000 potential users of text relay services cited above. Many of this larger group, who are effectively included in the other categories of residential customer segments listed in this annex, will have a range of difficulties in using the conventional telephone. These difficulties stem from people being hard of hearing, having speech, visual or physical impairments or disabilities or learning difficulties or falling into several of these groups

F Unphoned

- Some 2 to 2.5 million households
- 50% of unphoned on income of less than £6000 a year
- Estimate some two thirds of this group want to be on the phone but can't afford it
- Mainly social class D and E, around half in age group 20–40, around [illegible] thirds renting (and around half of these [illegible] authority tenants)
- Phone uses by this group – reliant on neighbours/public call boxes/work to make calls or be contacted

SERVICES CURRENTLY SUBJECT TO PRICE CONTROL

Access market

C.5 Access to the telecommunications network refers to the link between the network termination point in the customer's premises and the connection to the main distribution frame [illegible] the

local exchange from which the customer can then communicate with other subscribers. Until relatively recently most customers did not have a choice between access providers and they were also tied to BT for the delivery of all their telecommunications services: an exception being Mercury offering a call service via an "indirect access" facility.

C.6 Being the sole provider of access to a customer gave BT 'bottleneck' control over calls originating or terminating on that customer's line. The most recent **annual** figures indicate that BT has over 95 per cent of all residential lines (see Table C.1 below) but this figure has fallen since March 1995.

C.7 However, sole provision of access is changing: where homes have been passed by cable TV, customers now have a choice between access to BT and access to cable telephony. The introduction of number portability will also help significantly the development of competition between access providers at the residential level.

C.8 Cable telephony has been targeted primarily at residential customers but there are a number of business subscribers. Although overall cable TV penetration rates have been static – on average penetration rates are estimated to be in the order of 20-25 per cent of homes passed and marketed – a high proportion of households that subscribe to cable TV have also subscribed to cable telephony so that cable telephony penetration rates have been far higher than were once anticipated. As a share of all homes passed by cable TV, the penetration rate for cable telephony is about 20 per cent. As at end June 1995, 82 out of the 92 cable franchises that were then operational offered cable telephony and cable companies have so far passed a total of 5m homes – just under 25 per cent of all UK homes. The latest figures indicate that there are now over 1m installed cable telephony exchange lines.

Table C.1 Number of residential and business telephone lines (millions) 1994/95

	Residential	Business	TOTAL
BT	20.61	6.46	27.07
Mercury	0.00	0.24	0.24
Kingston	0.14	0.03	0.17
Cable	0.74	0.07	0.82

Notes
Figures for Mercury are for direct connections
Figures for cable refer to number of subscribers

C.9 When the build programmes of the 125 cable franchises that have been licenced under the Telecommunications Act have been completed, approximately two thirds of UK homes will have access to cable (14.5m homes out of a total of 22m). Additional franchise areas (Local Delivery Operator areas) awarded or advertised by the Independent Television Commission will eventually take this figure to over 75 per cent of homes. Cable telephony therefore has the potential to become a significant competitive threat to BT.

C.10 A third access provider, Ionica, is due to launch in 1996 and will be rolling out its services over the next price control period. Eventually its services will be available through out much of the UK including a licensing arrangement with Scottish Telecom for Scotland. The radio-based distribution system which Ionica proposes to use will enable it to offer an alternative to BT's and cable's access services. Given that it has the potential to provide a service in areas in which it would be uneconomic for cable companies to build, it will also help to increase the range of customers that have a real choice of access provider.

C.11 There are already a number of operators which provide service directly to business customers: eg BT, Mercury, Energis, COLT, MFS, Torch, etc. However, the degree of competition that BT faces tends, at present, to be limited to urban areas with the result that overall BT still has in the order of 95 per cent of lines installed to business customers (see Table C.1).

C.12 Many new operators have chosen to roll out their competing networks in city business districts first. There are obvious factors which make this approach attractive: the density of business customers and other organisations which require a variety of telecommunications services means that the distances involved in servicing what tend to be high value customers are relatively small and therefore potentially profitable relative to the initial investment. In addition the telecommunications managers of such companies tend to be sophisticated customers who may be more willing to try service offerings from the new entrants.

C.13 Although competitive pricing has undoubtedly been important for these companies in establishing themselves, they are able to offer more than just a cut-price service: they are increasingly able to offer a range of services, tailored to customers' requirements.

C.14 At present competition in access services for most residential and business customers is probably best described as uneven. In some areas and for some classes of business user there is very little effective competition to impose any significant constraints on BT's behaviour. For instance, the position of the smallest business customers probably mirrors the situation of residential customers.

C.15 BT faces stiff competition for large business customers and large corporate users, in particular, may choose to source their requirements for telecommunications services from several different network operators, thus using different access providers. They can also choose to contract out the management of their telecommunications requirements and leave it to third party service providers to negotiate the best packages from a range of operators. Contracting out is likely to become increasingly common.

C.16 As the new operators become established, they expect to expand their fields of operation and roll out their services into other areas. For instance, COLT intends to start construction of networks for corporate users in Manchester and Edinburgh and Scottish Telecom plans to offer a complete service to business and residential customers throughout Scotland.

OFTEL would welcome views on the extent to which effective competition in the provision of access services is likely to develop across different customer groups and across different geographical areas in the future.

Inland calls: local and national calls

C.17 At the retail level, some network operators compete to offer a customer a complete range of telecommunications services directly (eg cable companies who provide a whole range of telephony services) while others offer a limited range of services through indirect access: the latter typically involves the customer retaining the BT line for access but using other carriers, eg Mercury.

C.18 The entry of new carriers such as Energis has meant that cable operators now have a choice of operators with which they can link up to offer services outside their franchise areas.

C.19 At the same time competition at the wholesale level has also been stimulated by the decision of some operators not to compete at the retail level but to position themselves to act as a 'carriers' carrier' carrying traffic for other operators: for example, NTL currently acts in this way.

C.20 This competition at the wholesale level between carriers has put downward pressure on wholesale prices and [illegible] prices to fall.

C.21 It is not clear how many more firms might try to market their call services direct to the customer in future. Some operators may choose to offer services to the customer utilising some sort of indirect access facility and arranging for interconnection via the access provider.

C.22 The extent to which price reductions available to operators as a result of competition at the wholesale level will be passed through as price reductions to retail customers could depend on the degree of competition at the retail level. Competition in the provision of inland calls to residential customers could mirror the development

of competition in the provision of access services in that the choice of service provider available to customers will depend on having been passed by a cable company or by a company using radio based technology.

C.23 For the business user there is already a degree of competition in the provision of call services. Business users have been targeted by new entrants because even just a few high spending customers can yield large revenues for a relatively small initial outlay.

C.24 In the future there is likely to be still more competition between network providers: AT&T is in the process of establishing itself in the UK; utilities are developing their own networks, eg Scottish Power, Norweb, and other companies such as Torch and Racal are positioning themselves to compete to supply telecommunications services to business users on a regional basis.

OFTEL would welcome views as to the extent to which the market for inland calls is likely to become fully competitive for all customer groups over the next price control period.

International Direct Dialled (IDD) calls

C.25 The BT/Mercury duopoly of the provision of international gateway facilities means that no other operators can own international circuits into or out of the UK.

C.26 The provision of IDD calls is a market in which Mercury had made significant progress in winning business from BT. In 1994/95 BT's share of the market for outgoing international voice traffic had fallen to 70 per cent. However, given that the duopoly in the provision of international gateway facilities means that on most routes the threat of entry is absent, it is difficult to assess the degree of real competition for IDD calls between the two.

C.27 The introduction of International Simple Resale (ISR) has made the market for the provision of International Direct Dial (IDD) calls on those routes on which voice ISR is permitted significantly more competitive. On those routes - Canada, the USA, Sweden, Finland, Australia and New Zealand - the price for international calls has fallen substantially: eg on the UK–US route, BT's charges for a three minute standard rate call has fallen by around 45 per cent (in nominal terms) between 1990/91 and 1994/95.

C.28 The extent of price reduction has been possible because the prices of international calls have historically been significantly out of line with the costs of providing those calls and so there is considerable room for arbitrage by resellers. The introduction of competition has been successful in beginning to drive prices down towards costs.

C.29 Moreover both corporate and residential customers have benefitted from these price reductions. Not only have Mercury and BT been forced to respond by lowering their own tariffs, but the savings through using an ISR operator are also widely available. For example, the ISR operator ACC Long Distance UK Ltd estimates that around half of its business comes from residential customers.

C.30 A degree of competition may also be available for business users on routes other than those on which ISR is permitted because one-end break out into the PSTN from a private circuit is permitted to any country in the world under a Telecommunications Service Licence. However, it is difficult to judge how significant an impact this has had on competition.

C.31 The recent decision by OFTEL to publish details of accounting rates for IDD calls between the UK and other OECD countries in order to improve the transparency of settlement rates may encourage more reductions in accounting rates and more competition between BT and Mercury as margins fall.

C.32 OFTEL will shortly be publishing a consultative document on how to secure the benefits of competition for the users of international telephony services. This document will make proposals for interconnection arrangements for IDD calls from April 1996 which will promote greater competition in the UK market.

OFTEL would welcome views as to the impact on competition in the provision of IDD calls of one-end breakout into the PSTN. It would also welcome views as to the extent to which the IDD market is likely to become fully competitive for all customers during the next price control period.

Directory enquiries and operator assisted calls

C.33 At present because of its near monopoly over direct customer connections, BT has an effective monopoly over the raw data used to provide directory products, although it is obliged to make the data available to other operators with whom it interconnects. Mercury has withdrawn from providing its own directory enquiry service and has contracted this service to a third party service provider. There is little competition in this market at present.

C.34 At the end of October, OFTEL issued a consultative document *Use of Directory Information* which deals with directory enquiries and other products provided using directory information. The proposals in the document are intended to stimulate competitive service provision. Under the new regime, Licensed Database Managers (LDMs) would be able to provide directory products. Operators would be obliged to provide their directory information to at least one LDM. LDMs would then be obliged to exchange information. The document consults on the terms on which an LDM licence might be available: none have yet been granted.

OFTEL would welcome comments on the extent to which there will be effective competition in the provision of Operator Assisted/DQ calls taking into account OFTEL's proposals for stimulating competition in this area.

Specially tariffed services

C.35 The provision of specially tariffed services (eg 0800, 0345, 0990) has been an area in which BT has enjoyed a significant degree of first mover advantage. For instance, Mercury found that there was little awareness of its 0500 freephone service in comparison to BT's 0800 service.

C.36 OFTEL now has responsibility for the administration of numbering and determining numbering policy. The numbering policy for these services, including number portability, is under review within the context of a broader review of numbering strategy in order to ensure that more effective competition in the market for these services can develop.

OFTEL would welcome views as to whether there is likely to be effective competition in the provision of specially tariffed services and in particular the extent to which competition will depend upon the implementation of number portability for these services.

Private circuits

C.37 At present OFTEL has chosen to make a distinction between high and low capacity circuits based on a threshold drawn for digital circuits at 64 kbit/s.

OFTEL would welcome views as to whether it is appropriate to make a distinction between digital circuits with a capacity of more than or less than 64 kbit/s for the purposes of assessing effective competition. For instance would it be more appropriate to make a distinction based on circuits up to 64 kbit/s circuits of between 64 kbit/s - 2 Mbit/s and circuits over 2 Mbit/s?

Inland low capacity private circuits

C.38 BT is the only operator in the UK to offer the analogue circuits which make up the bulk of this market. Mercury does offer digital circuits of up to

64 kbit/s capacity but overall there is very little competition in this market and there is little prospect of effective competition developing. The provision of low capacity circuits tends to be a relatively high cost exercise unless these services are provided in conjunction with other services.

OFTEL would welcome comments on its analysis of the prospects for competition in the provision of low capacity inland private circuits.

Inland high capacity private circuits

C.39 The liberalisation of the UK telecommunications market has led to an increase in the number of providers of digital leased circuits although this has mainly been in the field of circuits with a capacity of more than 2 Mbit/s.

C.40 Given that high capacity leased circuits are products used by larger businesses rather than small businesses or residential customers, it is possible that the larger corporate customers possess a degree of buyer power (in terms of being able to trade one operator off against the other) in this market which has been augmented by the increase in the number of operators from which they can choose.

OFTEL would welcome views as to whether corporate customers possess a degree of buyer power in this field and whether there will be effective competition in the provision of high capacity private circuits.

International private leased circuits: low and high capacity

C.41 The duopoly provision of international gateway facilities means that currently only BT and Mercury can provide international leased circuits. This means that all competitive methods of transporting traffic (eg one-end break out and ISR) are dependent upon obtaining international private leased circuits from BT or Mercury.

C.42 However, as with high capacity inland private leased circuits it is possible that some customers could possess a degree of buyer power which could mean that the operators' conduct is more competitive than the duopoly structure might suggest.

OFTEL would welcome views as to the degree to which there will be effective competition in the provision of high and low capacity international private leased circuits over the next price control period.

SERVICES CURRENTLY NOT SUBJECT TO PRICE CONTROL

Vision circuits

C.43 At the time of the last price control review, vision circuits (ie private circuits which are used to carry broadcast sound and vision services) were excluded from the price caps that applied to inland and international private circuits. One of the principal reasons for this exclusion was that BT argued that vision circuits were used to provide bespoke services and thus needed a degree of price flexibility.

C.44 In light of the recent order made against BT in respect of satellite uplinking services, OFTEL wishes to look again at this service. OFTEL recognises that vision circuits are not used exclusively in the provision of satellite uplinking services and that other operators such as NTL, Energis and Mercury also provide vision circuits to the media industry.

OFTEL would welcome comments as to whether it is appropriate to distinguish between vision circuits and other private circuits and, if so, whether there is likely to be effective competition in the provision of vision circuits.

C.45 Similarly at the time of the last price control review private circuits which are used to provide closed circuit television (CCTV) services were excluded from the price cap for private circuits.

OFTEL would welcome views as to whether it is appropriate to distinguish private circuits used to provide CCTV services from other private circuits and, if so, whether there will be effective competition in the provision of these circuits.

Telex

C.46 It is estimated that there are in the region of two million telex terminals worldwide. However, telex has been comprehensively superseded by the fax and e-mail and demand for telex services has fallen both in terms of volume of telex traffic and the size of the customer base. In 1988 BT had 110,000 telex customers - by 1994 this had fallen to 40,000. OFTEL is not proposing to include telex within the price cap as it is believed that in most cases customers have simply switched to newer services such as fax and e-mail.

OFTEL would welcome views on its analysis of the market for telex services.

Payphones

C.47 Public call boxes (PCBs) are defined in BT's licence in terms of being situated on public land to which the public has 24 hour access. Private payphones are those which are located on private property and consequently public access to them may be restricted, for instance, railway stations, pubs, shopping centres or hospitals.

C.48 Until the entry of the Italian company Industria Politecnica Meridionale (IPM) last year, the provision of PCBs in the UK had effectively been limited since only BT, Mercury and Kingston (together with a few cable companies) operated PCBs. IPM has taken over a number of Mercury's PCB sites following Mercury's decision to withdraw from offering this service.

C.49 There are no such restrictions on the provision of private payphones which can be operated under the class Telecommunications Services Licence (TSL) and a number of operators and service providers offer private payphone services.

C.50 Thus, competition to date has developed principally in the private payphone sector of the market. However, OFTEL proposes to modify the PCB Condition in the licences of all the other PTOs to enable them to offer PCB services to the public on a deregulated basis.

C.51 There is also the prospect of an increase in the range of services which are offered from PCBs: for instance, BT is experimenting with offering facsimile services from PCBs.

C.52 The development of card/account based services could also provide competition to payphones both by simplifying their use and at the same time providing alternatives.

OFTEL would welcome views on the prospects for the development of effective competition in the provision of payphones in the future.

ISDN lines

C.53 ISDN is essentially a delivery mechanism. It is a means of delivering a variety of telecommunications services through a common means of access to a digital switched network. ISDN lines provide an end to end digital [illegible] linking [illegible] fully [illegible] wideband network and the ability to offer [illegible] data, image and text services over the same network connection. At its most ambitious it has the capability of offering video transmission and facilitating a genuine convergence of telecommunications and other electronic media enabling the delivery of IT, telecommunications services and video services over the same network connection.

C.54 A distinction has been made between basic rate and primary rate ISDN lines. Currently only BT offers basic rate ISDN lines through its ISDN 2 service. Customers have a degree of choice for primary rate ISDN lines in that as well as BT's ISDN 30 service, Mercury also has an ISDN

offering. In future there is the prospect of broadband ISDN lines.

C.55 ISDN has not had the success in the UK that it has had in, say, Germany and France for a number of reasons: private circuits are more readily available in the UK than in those other countries, connection charges for ISDN in the UK are relatively high and there are significant price differentials in terminal adaptors in the UK.

C.56 In light of increased demand for ISDN lines from business and the possibility that in future residential customers might wish to choose ISDN access in order to take advantage of new on-line or 'multimedia services', OFTEL wishes to review this market.

OFTEL would welcome comments as to whether there will be effective competition in the provision of ISDN lines in the future.

Value added and data services

C.57 The value added and data services sector covers a wide range of products and services that deal with the electronic transfer of information: eg ticket reservation systems, database access, teleshopping, e-mail, home banking, linked automated teller machines, Electronic Funds Transfer at Point of Sale (EFTPOS), video-conferencing and Electronic Data Interchange (EDI). As well as these messaging and transaction based services there are also associated network management services.

C.58 At present OFTEL has chosen to group the various types of VADS together under these two broad headings: Messaging/Transactional services and Network Management/Support services. There are a wide range of telecoms and specialist firms operating in these sectors and the various markets are generally regarded as being competitive.

C.59 A recent report by CIT Research Ltd estimated that revenues for the Network Management and Support Services sector were around £372m and revenues for the Messaging and Transactional Services sector were £257m. It also estimated that BT's share of these two sectors was 16 per cent and 9 per cent respectively. There are a wide range of firms in these markets including Cable & Wireless/Mercury, IBM and AT&T.

OFTEL would welcome comments as to whether it is appropriate to regard Value Added and Data Services markets as being competitive at present and whether they are likely to remain so.

Mobile services

C.60 This Annex has so far focused on the fixed link telecommunications sector and has put the mobile sector to one side. This is in part because there is a presumption that the retail markets for mobile telephony and mobile data services are competitive. Although the number of network operators is subject to regulatory restrictions, there are a large number of service providers which not only compete to purchase airtime from the operators but also have to compete with each other for customers.

C.61 The mobile sector is characterised by a wide range of innovative service offerings and pricing packages and OFTEL believes that the mobile sector is sufficiently competitive not to require a price cap for retail purposes.

C.62 At present mobile services are considered as an adjunct to fixed services rather than as in competition with them. However, in the future there is the prospect of increasing convergence between mobile and fixed services and this would have a significant competitive impact.

OFTEL would welcome comments on the extent to which there is effective competition within the mobile sector. It would also welcome comments on whether the possible convergence of fixed and mobile services might raise issues which should be addressed in this price control review and, if so, what they are.

ANNEX D

Long Run Incremental Costs

FORWARD LOOKING COSTS

D.1 At present, the main basis of costs used to regulate BT is fully allocated costs using the historic cost accounting convention. For example, interconnection charges for use of BT's network are currently set on the basis of fully allocated costs. In future, OFTEL proposes to use the appropriate costing methodology for its regulatory decisions, which would usually be forward looking long run incremental costs. For the next control period OFTEL proposes that interconnection charges will be based upon long run incremental costs, provided that a robust methodology can be established. The methodology to calculate long run incremental costs is discussed in greater detail in the next section of this Annex.

D.2 Long run incremental cost is a forward looking concept and so would be reflected more accurately by the use of current cost accounting (CCA) rather than historic cost accounting (HCA). In the HCA approach the basis for the valuation of an asset is its historic cost, its cost at the time that it was purchased. In the CCA approach the basis for valuation is the replacement cost of an asset, how much it would cost today if it were to be replaced.

D.3 Forward looking costs are the appropriate basis for interconnection charges because they reflect resource costs. Ideally for economic efficiency, the prices of retail services should be set in a way which encourages consumers to take account of the resource costs of their purchasing decisions. Operators would be encouraged to set efficient retail prices if they could purchase a major input (interconnection) at a charge that was set by reference to the cost of the resources consumed by its provision. Since replacement costs would be the costs faced by a new entrant, signals would be given to encourage efficient entry into and exit from interconnection services, if the incumbent's interconnection charges were set on the basis of forward looking costs. An entrant into provision of interconnection services that was more efficient than the incumbent could make a profit by setting a charge below the incumbent's charge, whereas an inefficient firm would be unprofitable if it were to match the incumbent's charge. In addition, efficient entry into retail services would be encouraged although this would depend also upon the nature of retail prices.

D.4 In its purest form, the concept of forward looking costs requires that assets are valued using the cost of replacement with the modern equivalent asset (MEA). The MEA is the [illegible] which serves the same function as the asset being valued. It may incorporate the latest available and proven technology [illegible] entrant might be expected to employ [illegible] which technology [illegible] likely that, for some assets, the MEA [illegible] from the asset that an incumbent currently has in place. For example, BT continues to use analogue local switches to serve a proportion of customers but the MEA for a local exchange would [illegible] be a digital switch.

D.5 In the preparation of its CCA accounts BT [illegible] an MFA approach for some asset groups, but adjusted for the technology mix in three years' time (the 'three year look'). The valuation method used by BT is based on the lower of its net replacement cost and its recoverable amount. Only where [illegible] asset is not expected to be replaced in its [illegible] form because of technological advances might [illegible] 'three year look' approach be adopted. Since [illegible]